

In the Claims:

Please cancel claims 13-15 without prejudice. Please amend claim 1 as follows:

1. (Currently amended) A method of treating osteoarthritis comprising:
 - a) generating a recombinant viral or plasmid vector comprising a DNA sequence encoding transforming growth factor β 1 or ~~BMP~~ BMP-2 operatively linked to a promoter;
 - b) transfecting *in vitro* a population of chondrocytes with said recombinant vector, resulting in a population of transfected chondrocytes; and
 - c) transplanting said transfected chondrocytes without scaffolding by intraarticular injection to an osteoarthritic joint space of a mammalian host, such that expression of said DNA sequence within said joint space results in regenerating ~~connective tissue~~ hyaline cartilage.
2. (Previously presented) The method of claim 13, wherein said recombinant viral vector is a retroviral vector.
3. (Previously presented) The method of claim 13, wherein said recombinant vector is a plasmid vector.
4. (Previously presented) The method of claim 13, wherein said population of transfected chondrocytes are stored prior to transplantation.
5. (Previously presented) The method of claim 4, wherein said population of transfected chondrocytes are stored in 10% DMSO under liquid nitrogen prior to transplantation.
- 6.-22. (Canceled)